REMARKS

Claims 1-32 were examined. Claims 1, 8, 14, 17, 26, and 30 are amended. No claims are canceled or added. Claims 1-32 remain in the application. Reconsideration of the pending claims is respectfully requested in view of the above amendments and the following remarks.

I. Claims Rejected Under 35 U.S.C. § 112, first paragraph

Claims 1-32 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

According to the Office Action mailed on February 17, 2006, the Examiner asserts that there is no clear and exact written description for "physical resource object" and "virtual resource object," and that while examples such as graphics controller rendering engines, digital video output units, digital display outputs, and video capture ports are provided to support the claim language, "physical resource object," there is no teaching. Applicant respectfully disagrees with the Examiner's assertion. As the Examiner acknowledges on page 4 of the Office Action, physical and virtual resource objects are taught in paragraphs [0012], [0046] and in Figure 6. One of ordinary skill in the art would understand from reviewing these sections of the application that physical and virtual resource objects are representations of physical and virtual resources in an object-oriented paradigm. Thus, physical and virtual resource objects are one embodiment for representing the physical and virtual resources discussed throughout the application. Thus, one of ordinary skill in the art would understand that all discussion of physical and virtual resources in the specification can be utilized in an object-oriented paradigm as physical and virtual resource objects. Therefore, one of ordinary skill in the art would understand that the inventors possessed the claimed invention at the time of filing. Accordingly, reconsideration and withdrawal of the §112, first paragraph rejection of claims 1-32 are respectfully requested.

Furthermore, Applicant also disagrees with the Examiner's assertion that there is no clear written description of "creating a tree relationship for the parent and child objects to the physical and virtual resources objects." Paragraph [0024] of the specification as filed describes a root of the namespace tree structure represented by a system logic device 202, which is then linked to a system memory object 204. Paragraph [0029] describes that a resource manager can determine the net

available bandwidth of the system by walking the various branches of the tree structure shown in Figure 2. In Figure 2, a tree relationship for the parent and child objects to the physical and virtual resource objects is clearly depicted. Therefore, the specification and the figures clearly describe the claim limitation of "creating a tree relationship for the parent and child objects to the physical and virtual resources objects."

Applicant respectfully submits that the claim language is fully supported by the specification and accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

II. Claims Rejected Under 35 U.S.C. § 112, second paragraph

Claims 1-32 are rejected under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections.

Claims 1 and 17 are amended to provide a direct relationship between the parent and child objects and the physical and virtual resource objects. Specifically, claims 1 and 17 are amended to reflect that a parent object represents a physical resource object and a child object represents a virtual resource object.

Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

III. Claims Rejected Under 35 U.S.C. § 103

Claims 1-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,799,208 issued to Sankaranarayan et al. (Sankaranarayan). To establish a *prima facie* case of obviousness, there must first be some suggestion or motivation to modify a reference or to combine references and second, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. Third, the prior art reference or references when combined, must teach or suggest all the claim limitations. M.P.E.P § 706.02(j) from *In Re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

With respect to claims 1 and 17, among other limitations, claims 1 and 17 recite "storing a list of physical resource objects; storing a list of virtual resource objects" and "storing a list of parent and child objects." Sankaranarayan does not disclose these limitations.

Rather, Sankaranarayan discloses a computer system that manages resources including multiple providers wherein each provider has a resource quantifier 107 that determines the amount of a resource available for allocation by the resource manager 102. The resource quantifier 106 calculates resource availability as a percentage. For example, a resource quantifier 106 for a provider of network resources computes the percentage of bandwidth currently available for use. (Abstract; col. 7, lines 47-48; col. 8, lines 1-17)

Applicant respectfully submits that the resource quantifier 106 does not teach or suggest storing a list of physical resource objects, virtual resource objects, or a list of parent and child objects. Rather, it conducts a measurement and provides a quantity for an available resource. The Applicant has been unable to discern any part of Sankaranarayan that discloses the use of lists in this process. Therefore, Sankaranarayan does not disclose the limitations of claims 1 and 17. If the Examiner maintains this rejection of claims 1 and 17, the Applicant respectfully requests that the Examiner clarify the manner in which these elements of the claims are taught or suggested by Sankaranarayan.

Claims 2-13, and 18-32 depend from claims 1 and 17 and therefore incorporate the limitations of these independent claims. For at least the reasons stated above, these claims are patentable over Sankaranarayan.

With respect to claims 14 and 30, among other limitations, claims 14 and 30, as amended, recite "tracking a relationship among resource producers and resource consumers in a tree data structure, a root of the tree data structure to represent a physical device that consumes the available resources." Sankaranarayan does not teach or suggest this limitation.

Rather, Sankaranarayan discloses that the root of a tree is a configuration 124 wherein the configuration is a data structure holding a collection of one or more resource descriptors 126 for corresponding resources needed to perform a task in the system. (col. 9, lines 7-21). The configuration file contains resource descriptors such as descriptors R1, R2, R3, and R4. (col. 9, lines 25). Each application might specify one or more configurations for each activity, as illustrated by two configurations 124(1) and 124(2) for activity 122(1). Configurations may be added to an acitivity at any time. (col. 9, lines 50-60). Therefore, because the configuration 124 of Sankaranarayan relates to an activity, the configuration 124 does not represent a physical device. Therefore, the root of the

tree data structure in <u>Sankaranarayan</u> does not represent a physical device. Thus, <u>Sankaranarayan</u> does not disclose this limitation and does not teach or suggest the limitations as recited in claim 14.

The Examiner asserts that it would have been obvious for one ordinary skill in the art at the time the invention was made to relate a resource tree structure to a producer and consumer of a resource. Applicant respectfully submits that a tree data structure with a root representing a device is not taught by <u>Sankaranarayan</u>. What makes a data structure efficient and useful is the type of information stored in the data structure, the relationships among the information stored in the data structure, and the method of accessing such information. Because <u>Sankaranarayan</u> organizes its resource data structure by different activities or tasks and not by each physical device as recited in claims 14 and 30, the data structure of <u>Sankaranarayan</u> is fundamentally different than the tree data structure recited in claims 14 and 30 and therefore, <u>Sankaranarayan</u> does not suggest the limitations recited in claims 14 and 30.

Claims 15, 16, 31, and 32 depend from claims 14 and 30, respectively, and therefore incorporate the limitations thereof. For at least the reasons stated above, these claims are patentable over <u>Sankaranarayan</u>. Accordingly, reconsideration and withdrawal of the rejections of claims 1-32 are respectfully requested.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending (1) are in proper form, (2) are neither obvious nor anticipated by the relied upon art of record, and (3) are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

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